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Academics' Perceptions of Their Teaching Practices

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Abstract:
This study investigates academics' perceptions of their teaching practices.To collect data,a sample size of 38 voluntary academics is included with demographics. A group of 9academics is then selected for semi-structured interviews to obtain data from varioussamples. Data from the interviews are analysed through percentages and frequenciesand discussed thematically. Accordingly, academics perceive their teaching practices as mainly shaped by their methodology, roles and responsibilities, and relational elements. Most academics consider learner-centred strategies as a positive contribution to their teaching practices. However, they seem to be inclined to use teacher-centred practices more. As a result, they struggle to find their own way to combine both focuses. In addition academics prioritize gaining skills over gaining knowledge. Opposingly, most academics prefer to focus on the curriculum content strictly and transfer knowledge in the first place. Researchers, hence, agreethat making use of teaching perceptions, especially over prolonged engagement in thinking and a periodical renovation coming out of self-evaluation to reach a personally valued direction are recommendable.

Keywords: Academics' perceptions, Knowledge transfer, Learner-centred teaching practices, Teacher-centred teaching practices,

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Akademisyenlerin Öğretim Uygulamalarına İlişkin Algıları

Özet

Bu çalışma akademisyenlerin öğretim uygulamalarına ilişkin algılarını araştırmaktadır. Verilerin toplanması amacıyla öncelikle 38 gönüllü akademisyenden oluşan bir örneklem büyüklüğüne ulaşılmıştır. Daha sonra maksimum çeşitlilikte örneklemden verilere ulaşmak amacıyla yarı yapılandırılmış görüşmeler için 9 akademisyenden oluşan bir grup seçilmiştir. Görüşmelerden elde edilen veriler yüzde ve frekanslara göre analiz edilmiş ve tematik olarak tartışılmıştır. Buna göre akademisyenler, öğretim uygulamalarını, esas olarak metodolojileri, rolleri ve sorumlulukları ile ilişkisel unsurlar tarafından şekillenen bir süreç olarak algılamaktadırlar. Çoğu akademisyen, öğrenci merkezli stratejileri öğretim uygulamalarına olumlu bir katkı olarak görmektedir. Ancak öğretmen merkezli uygulamaları daha fazla kullanma eğiliminde oldukları görülmektedir. Sonuç olarak, her iki odağı birleştirmekte zorlandıkları belirlenmiştir. Ayrıca akademisyenlerin bilgi edinmekten ziyade beceri kazanmaya öncelik verdiği sonucuna ulaşılmıştır. Buna karşılık çoğu akademisyenin, öncelikle müfredat içeriğine odaklanmayı ve bilgiyi aktarmayı tercih ettiği sonucuna da ulaşılmıştır. Bu nedenle araştırmacılar, akademisyenlerin kendi bakış açılarından fayda sağlayacakları bir noktaya ulaşmalarında sürece dayalı düşünselliğin ve öz değerlendirmeden kaynaklanan periyodik yenilemelerin işlevselliği konusunda hemfikir olmuştur.

Anahtar Kelimeler: Akademisyenlerin algıları, Bilgi aktarımı, Öğrenci merkezli öğretim uygulamaları, Öğretmen merkezli öğretim uygulamaları

Introduction

When it is classroom instruction, deciding what to include and do may need to be clarified by the teacher. The courses indeed include both content and pedagogy instruction, and the struggle to balance these aspects is natural (Myers & Paulick, 2020). As an attempt to provide a single explanation for in-class dynamics, which are indeed a wide array of choices from diverse backgrounds and interests, would not be practical, it is better to be sensitive to contextual factors unique to academics and their teaching-learning environment. How they continue their satisfaction with their environment is a unified perspective on the core factors shaping their experiences. Examining, revealing, and trying to understand their set of related perceptions of their teaching strategies seems to be the safest way. Teaching strategies are, in fact, practices used by the teacher to achieve educational aims focusing on developing the student's intellectual abilities (Amparo et al., 2018). As they are put into practice by teachers in the classroom to establish a quality education system, it is reasonable to benefit from their perceptions (Marsh & Willis, 2003). Moreover, what teachers believe and do is reflected mainly in what they do in class (Bantwini, 2010), both in negative and positive ways. In this case, researching their perceptions about their teaching practices helps get some clues.

Just like all the teaching staff, academics choose from different alternatives through a complex process. Coming from different backgrounds, they may recognize, understand, and emphasize different aspects of education. Hinchman and Lalik (2000) mention that perceptions are shaped by academics' views and their understanding, including professional ones based on experience. Caring for specific needs, the academics choose content and teach

in the most promising way for their students to acquire the knowledge, which is unfortunately not a process without obstacles. All academics then have to face challenges that need to be analyzed and overcome. Sometimes, this may be overwhelming because, as Gulliksen and Hjardemal (2016) mention, it is often a struggle to balance what is practically possible to cover in one course and what is to be left. Furthermore, focusing on skills rather than knowledge is another hard choice. For example, Snow et al. (2005) believe it is imperative for learners to understand the theoretical and empirical underpinnings of literacy development. Honan and Mitchell (2016) instead stress the need to prepare them with the skills, knowledge, and understanding required to work within the complex context of their department. Thanks to the desire for their job and despite the influences or challenges, each academic makes decisions and gives priority to some types of information over others or one form of instruction or assessment over another. As a result of their perceptions, they make their decisions. Their decisions, then, resulting in their teaching practices, should be understood to shed light on the advantages and disadvantages of certain in-class practices.

Teaching practices have long been characterized as based on the assumption that teachers are the only source of information and responsible for teaching-learning. However, today, the practices are known to work well when they are in line with learners' needs. When the practices are used to enhance reasoning for understanding and strengthen problem-solving skills, creativity, and collaboration, they are considered to be effective, and learner-centered practices are confirmed as such (Brodie, 2006). For instance, Walters et al. (2014) state that student-centered instruction promotes students' understanding, deep learning, problem-solving, critical thinking, and communication. Likewise, Kober (2015) confirms that student-centered instructional strategies are preferred to improve students' knowledge construction, conceptual understanding, attitudes toward learning, and higher-order cognitive skills. On the other hand, teacher-centered instruction strategies do not allow students to construct knowledge actively, and they are associated with students' poor performance, according to Mji (2003). Nyaumwe et al. (2004) add that the strategy is characterized by lecture, demonstration, drill, and practice and does not make learners develop a conceptual understanding. In line with these findings, academics, like other teachers, may prefer to focus on their learners' activities and let students construct their knowledge with the help of themselves acting as facilitators. However, there may be a thin line between these two orientations. A learner-centered educational environment may still be teacher-led. In other words, teacher-led learning may not necessarily be the opposite of learner-centered learning (Mji, 2003). The primary motive of this study is to differentiate in absolute terms or to understand the level of intermingling, if any, through more profound engagement with the academics' perceptions of their teaching practices.

Aim of the Study

With the higher aim of shedding light on in-class dynamics, this study is to reveal the framework of academics in their teaching practices. Grounded in findings from interviews and existing literature, an interpretation of factors influencing their practices is targeted in essence. An in-depth look at the process with its small scale of participants is supposed to highlight the importance of understanding contextual factors relevant to their perceptions as understanding

those perceptions is thought to have certain implications for in-class instructional dynamics. In line with the aim mentioned, this study looks for an answer to the research questions below:

- What are the core factors related to academics' teaching practices?
- How do the academics perceive their teaching practices?
- What do the academics do related to their perceptions about their teaching practices?
- How do the academics justify their actions aligned with their perceptions?

Methodology

To align the aim of this study with the research questions and reach the best interpretation of the findings, the research method adopted is qualitative with descriptive analyses. It is based on description as it aims to reveal the perceptions of academics related to their teaching practices. According to Armstrong (1968), perceptions are cases of acquiring beliefs, and they, in turn, are the selective behaviors resulting from some chain of cognitive processes. In other words, perceptions help clarify cognitive organization. A qualitative research approach, accordingly, reflects the complexity of the questions asked as they relate to the purpose of illuminating and interpreting such human-based cognitive data (Kalaycı et al., 2012).

Context of the Study

As a small-scale educational study, it is neither a policy nor an intervention study. Rather than focusing solely on defining concepts, it is targeted at understanding the underlying perceptions of academics' teaching practices. As a result, it is only carried out to describe the teaching practices of academics based on their perceptions. Because the study needs an in-depth and qualitative understanding, the number of participants is limited.

Sampling and Settings

The participants are 9 in number and from faculty with a variety of profiles. Their length of experience, department, university, number of students they have for one course, and titles vary. They were chosen using the non-random purposive sampling method to get maximum variation, and all the participants were volunteers as they had applied for and accepted the study in person. The selection of participants is mainly based on the varying factors mentioned above, including demographics. The participants, then, all have their unique teaching-learning environment. However, one thing they have in common is that they, as academics, are shaped by their experiences in the classroom and their relevant perceptions. This selection has resulted in 9 academics, 34 % of whom are from the foundation and 66% from the state universities. 55% of the participants have a teaching experience of over ten years, whereas 45% vary between 3 and 9 years. Besides, the average number of students they have in one semester for one course only has a broadly varied scale between 3 and 240. Of those 9 participants, 1 is a professor, 1 is an associate professor, 4 are assistant professors, 1 is a research assistant, and finally, 2 are lecturers.

As the objective of qualitative research is to lessen discovery failure, it is essential to realize that there is a point of diminishing return with larger samples, which means more data does not necessarily lead to more information, or it simply leads to the same information being repeated, which is called data saturation (Glaser & Strauss, 1967). This study, accordingly, reaches the appropriate sampling size through the 9 participants as mentioned. Participant profiles, including information related to their faculty, university, title, length of experience, and the average number of students, are detailed in Table 1 to provide a more precise context for the research setting.

Table 1

Participants' Profiles

	Department	*Title*	*Length of Experience*	*University*	*Average Student Number*
Participant 1	Forensics Biology	Assoc. Prof.	16 years	State	3
Participant 2	Science Education	Assist. Prof.	10 years	State	120
Participant 3	Architecture	Assist. Prof.	15 years	State	140
Participant 4	School of Foreign Languages (English)	Lecturer	5 years	Foundation	70
Participant 5	Educational Psychology	Lecturer	13 years	Foundation	50
Participant 6	Pediatric Nursing	Assist. Prof.	17 years	Foundation	80
Participant 7	Pharmacognosy	Research Assistant	9 years	State	240
Participant 8	Hyperbaric Medicine	Assist. Prof.	3 years	State	14
Participant 9	Theriatrics Biochemistry	Prof. Dr.	30 years	State	120

Instrument and Procedure

In this study, a semi-structured interview of six main questions is used to investigate the perceptions of academics related to their teaching practices. The research team has begun by reviewing the literature for developing the interview questions about related perceptions. As a result, an academically informative form including demographics and six interview questions has been designed. The form includes the participants' current university, department, title, length of experience in teaching, and the average number of students they have for one course in one semester. The six main questions are targeted at academics' perceptions related to their teaching practices and organized as sections, namely, teaching-learning (1), teacher-learner (2), methodology (3), strategies (4), and assessment (5). In addition, some components that seem to be highly effective in participants' understanding of educational definitions have been asked as relational elements (6).

Data Analysis

With semi-structured interviews of approximately 30 minutes for each, participants have

been required to respond as they are researchers and academics with the idea in mind that their educational environment is their experiential area. Once the data has been gathered, the interviews will be analyzed in three phases, following Miles and Huberman's (1994) recommendation of data reduction, data organization, and verification of conclusions. First, the research team transcribed, read, and reduced the data into relevant ones. Then, the qualitative data have been coded by the researchers separately. Next, operational definitions were identified by all researchers who made use of prolonged engagements through participants (Glesne, 2016). As the codes have been revealed, thematic analyses have been carried out by the researchers. Repetitive analysis and simultaneous processing have also been a part of data verification, something that Miles and Huberman (1994) suggest for more profound and safer analysis. From the whole set of data related to academics' teaching practices, 17 themes, 77 keywords, and 337 codes have been reached.

Results And Findings

The thematic analysis reveals three main categories: teaching-learning (1), methodology (2), and relational elements (3), which are in line with the interview questions. Accordingly, the analyses are presented separately for each category, including their keywords and sub-categories, if any, in terms of frequency and percentages first, followed by themes later.

'Teaching-Learning'Category

The first group of findings is based on participants' perceptions of teaching and learning. The roles of academics and learners are also a part of this group. Participants have a total of 133 codes. 26 codes for teaching, 22 codes for learning, and finally 85 codes for teacher (50 codes) –learner (35 codes) have been produced. The information in terms of frequency and percentage distribution is as follows:

Table 2

Frequency and percentage values regarding teaching–learning

Teaching	*f*	%	*Learning*	*f*	%	Teacher	*f*	%	Learner	*f*	%
Knowledge	10	38.46	Process	7	31.81	Characteristics	13	26	High order skills	10	28.57
Methodology	4	15.38	Active use of knowledge	6	27.27	Motivation	12	24	Motivation	10	28.57
Environment	3	11.53	Internalizing	5	22.72	Competence	8	16	Autonomy	5	14.28
Position	3	11.53	Gaining	2	9.09	Guidance	5	10	Awareness	4	11.42
Experience	2	7.69	Experience	1	4.54	Roles	4	8	Knowledge transfer	2	5.71
Awareness	2	7.69	Skills	1	4.54	Knowledge transfer	3	6	Critical skills	2	5.71
Process	1	3.84				Critical skills	3	6	Experience	2	5.71
Abilities	1	3.84				Sign of teaching	2	4			
Total:	26 Codes		Total: 22 Codes			Total: 50 Codes			Total: 35 Codes		

Main Themes for Teaching. In this part of the research, answers to how academics perceive teaching are analysed. The findings are shown in *Table 3* below:

Table 3

'Teaching' codes, keywords, and themes integration

Environment	Arranging teaching environment	
	Setting environment	
	The physical setting is not necessary	
Methodology	Appropriate content and its arrangement	
	Transferring the unknown through the appropriate method	
	Transferring terms, cases, and methods to have capable learners	Learner Oriented (Theme 1)
	Institutional content is not necessary	
Process	Planning a process in which learners can lead their own methodology and conditions	
Awareness	Raising awareness	
	Raising awareness through culture and values of society	
Experience	Letting the learner test things	
	Based on one's entity	
Knowledge	Transferring knowledge	Teacher Oriented (Theme 2)
	Transferring knowledge into an attitude	
Position	Making the learner feel understood	
	Counsellor	
	Guiding	
Abilities	Not helping the learner realize his/her conditions, opportunities, or chances but gain such skills	

Thematic Organization of 'Teaching-Learning' Category

Of the 133 codes produced for the first category (teaching-learning) of the research, a total of 29 keywords are identified (*see Table 2*). 26 codes related to teaching are grouped under 2 main themes with 8 keywords. 22 codes related to learning are grouped under 2 main themes and 6 keywords. Finally, 85 codes related to teacher-learner are grouped under 2 main and 2 sub-themes and 15 keywords.

Learner-Oriented Perceptions. Participating academics have produced 8 well-structured codes (2.35%). Of these codes, 3 keywords are identified as environment, methodology, and process. The most dominant keyword is methodology (15.38 %).

Teacher-Oriented Perceptions. Participating academics have produced 18 well-structured codes (5.29 %). Of these codes, 5 keywords are identified as *knowledge, position, awareness*, *experience*, and *abilities*. The two most dominant keywords are *knowledge* (38.46 %) and *position* (11.53 %).

It is clear from the findings that academics perceive teaching in two different ways. The first is based on learners while the other is on themselves. To illustrate, participant number 2 defining teaching as learner-oriented, has referred to the concept as *the experience of letting the learner do his/her job:*

> I describe teaching as preparing the environment for the learners to create an experience for the person who actually does the learning.

The first group of academics thinks of *teaching* as a process that is to be arranged according to the environmental and methodological needs of learners. Through prolonged engagement, it has become clear that they do not consider themselves as the source of knowledge. In other words, they are only stakeholders. As an outlier, there is even one participant (Participant Number 3) freeing the concept of teaching from any content and methodology.

When the opinions are closely examined, however, it is obvious that most perceptions of *teaching* are placed on the side of the academics themselves, as 5 of the 8 keywords belong to this theme. Acting as a counselor, their abilities and academic experience are important to them. The most favourable perception of this group is simply *transferring the unknown* to the learner. Participant number 9 has mentioned teaching as such:

> I think it is to help someone gain awareness about the subject that they have no knowledge of, by any means.

Main Themes for Learning. In this part of the research, the answers to how academics perceive learning are analysed. The findings are shown in *Table 4* below:

Table 4

'Learning' codes, keywords, and themes integration

Process	Learning how to teach	
	High motivation needed to process	
	Process-based	
	Relational process	
	The process of theory changing into practice	
	The process of reaching the target	
	Learners' own efforts and process	Process-Oriented
Internalizing	Internalizing knowledge	
	Defining cause-effect relations	
	Internalizing alone, through observation, inference, or relations	(Theme 3)
	Shaping knowledge by hearing, seeing, and doing	
Experience	Gaining experience	
Active use of knowledge	Using the knowledge actively	
	Adapting the knowledge to life from the source	
	Realizing the necessity of knowledge	
	How to use knowledge	Product-Oriented
	Transform from knowledge into behaviour	
	Using knowledge in professional life	(Theme 4)
Gaining	Gaining knowledge in memory	
	Adding on prior knowledge	
Skills	Gaining skills to use knowledge	

Process–Oriented Perceptions. Academics have produced 13 well-structured codes (3.82 %) for this theme. Of these codes, 3 keywords are identified as *process*, *internalizing*, and *experience.* The most dominant keyword is *process* (31.81 %).

Product–Oriented Perceptions. Participating academics have produced 9 well-structured codes (2.64 %) for the theme. Of these codes, 3 keywords are identified as the *active use of knowledge*, *skills*, and *gaining*. The most dominant keyword is the *active use of knowledge* (27.27 %). As can clearly be seen, academics perceive *learning* as either process or product-oriented. What is interesting is the shared significance of both sides. When the opinions are examined, it is realized that the number of keywords in both groups is equal in number. For process-oriented ideas, *learning* is simply a process gained through one's experience. By participant number 3, for example, learning is defined as below:

> I can define learning as having experience in a way that will engage processes like problem-solving.

It is important to realize that the process-oriented ideas of academics make sense when the deeper meanings related to learners' internalizing knowledge and gaining learning experience are taken into consideration. For product-oriented ideas, on the other hand, the most favourable definition is that *learning* is a product to be used actively or in real life. According to Participant Number 5, for example,

> learning is the active use of what is learned and seeing the benefits of knowledge in life.

Active use of knowledge is the most dominant keyword of this theme and reveals the strong connection between the supporters of themes 2 and 4. Namely, the academics defining teaching as teacher-oriented are also the ones perceiving learning as product-oriented. In other words, they need to transfer what they know professionally to a group of students in an educational setting and then see the results of their student's learning in their real life as a professional product.

Main Themes for Teacher-Learner. As part of this study, the roles of academics and learners from the academics' point of view are inquired. The results have been subjected to analysis and the findings are shown in Tables 5 and 6.

Differentiated Roles. Participating academics have produced 19 well-structured codes (5.58 %) for teachers and 18 codes (5.29 %) for learners' roles. Of these codes, the most dominant keyword for teachers is their *characteristics* (26%) and *high-order skills* for learners (28.57).

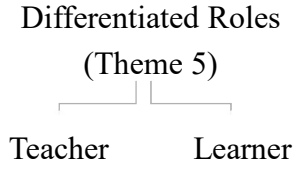
Exchanging Roles. Participating academics have produced 14 well-structured codes (4.11

%) for teachers and 12 codes (3.52 %) for learners' roles. Of these codes, the most dominant keyword is *motivation* (learners [28.57], teachers [24 %]) for both as the keywords are common for this theme.

Table 5

'*Teacher-Learner' codes, keywords, and themes integration for 'theme 5'*

Teacher		Learner	
Characteristics	Subject-oriented	High-order skills	Analysing and synthesizing
	Cooperative		Thinking and transferring
	Not over-generalizing		Looking for information
	Communicative		Discovering knowledge
	Able to listen		Reaching information
	Self-improving		Shaping information
	Disciplined		Observing
	Up-to-date		Detecting missing points
	Researcher	Experience	Creating own learning experience
Competence	Competent with methodology		Learning through experience and inference
	Competent in the field of study	Autonomy	Self-efficient
	Able to compensate for the missing		Responsible
			Learning to learn
	Planned for the course		Giving feedback
	Knowledgeable and experienced		Getting knowledge without external help
	Knowledgeable with personal, and institutional goals	Awareness	High-level of awareness
Sign of teaching	Learners saying 'I can do'		Aware of purpose
	Life skills		May not be aware of the responsibility
Guidance	Guide		
Roles	Exchanging roles		



Although the academics seem to divide into two contradicting groups, it is so important to realize the findings are certainly not categorized this way, especially for these themes. Differentiated roles of academics and learners are unique to each other whereas exchanging roles may belong to both groups. Within this categorization, what is primary for academics' roles is their personalities. The more competent they are in their field, the better they meet the requirements of their profession. Being able to listen, be supportive, be cooperative, and be communicative are their must-have personality traits. By participant Number 9, academics'

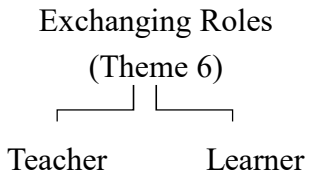
roles are perceived in a highly demanding way, such as:

I think a teacher is the one who can remediate any case.

Table 6

'Teacher-Learner' codes, keywords, and themes integration for 'theme 6'

	Teacher	*Learner*
Motivation	Enabling learning	Willing to learn
	Trying to reach learners	Trying to complete the learning process
	Motivated to teach	Curious
	Struggling for more	Active participant in the class
	Patient enough to re-tell	Looking for support to learn and use it efficiently
	Making learners realize the missing parts	Ready for the course
	Internally motivated	Internally motivated
	Enabling motivation in learners	Motivating the teacher with efforts
Knowledge Transfer	Setting an environment for knowledge transfer	Active use of knowledge
	Transferring knowledge	Transferring knowledge in professional life
	Teaching how to use the knowledge	
Critical Skills	Realizing learners	A critical thinker
	Criticizing what and why to teach	The one able to criticize
	Giving feedback to all tasks assigned	



Learners, on the other hand, are supposed to be *autonomous, have a high level of awareness, and be cognitively skilled* in terms of responsibility and other roles. However, an outlier is not necessary. Even though it is possible for the learners not to be aware of their roles and responsibilities, it is the teacher's responsibility to help raise awareness, according to Participant Number 4.

Motivation is crucial for academics to enable learning and for learners to be active. This study reveals that knowledge transfer is a pillar of teaching practices and is the source of motivation, according to participants. Hence, academics use it to clarify what is unknown to learners, and learners use it in the classroom to be active and in real life. While doing that, both sides should be critical thinkers, which helps academics realize their learners and learners realize themselves. This is a level of high awareness and perceived by participant number 7 as such below:

For me, a learner should realize how and why to internalize knowledge without any superior support.

'Methodology' Category

Methodology is the second category obtained through thematic analyses. *The aim and importance of the lesson subject* are among the focuses. Another one is based on *academics' actions,* and the last 2 are based on the participants' *justification rationales related to evaluation and re-organization*. Participants have produced a total of 145 codes. 20 codes for the aim and importance of the subject, 64 codes for teaching strategies, 39 codes for evaluation, and 22 codes for re-organization have been produced. Accordingly, a sum of 21 keywords is obtained. The information in terms of frequency and percentage distribution is as follows:

Table 7

Frequency and percentage values regarding methodology

Aim & Importance of the Subject	*f*	*%*	*Teaching Strategies*	*f*	*%*	*Evaluation*	*f*	*%*	*Re-organization*	*f*	*%*
Real life	7	35	Instrument	36	56.25	Instrument	22	56.41	Why	10	45.45
Objectives	5	25	Approach	9	14.06	Meaning	11	28.20	When	6	27.27
Reason	2	10	Objectives	9	14.06	Sign of Achievement	6	15.38	What	5	22.72
Ways to convey	2	10	Personality traits	5	7.81				How	1	4.54
Society	1	5	Dynamism	4	6.25						
Order of importance	1	5	Environment	1	1.56						
Critical thinking	1	5									
Media literacy	1	5									
Total:	20 Codes		Total:	64 Codes		Total:	39 Codes		Total:22	Codes	

Thematic Organization of Findings for Methodology

Of the 145 codes produced for the second category (methodology) of the research, 21

keywords as concepts are identified (*see Table 7).* 20 codes related to the aim and importance of the subject are grouped under 3 main themes with 8 keywords. 64 codes related to teaching strategies are grouped under 2 main and 2 minor themes with 6 keywords. 39 codes related to the evaluation are grouped under 1 main and 2 minor themes with 3 keywords. Finally, 22 codes for re-organization have produced only 1 main theme with 4 keywords.

Main Themes for the Aim and Importance of the Subject. In this part of the research, the analysis of the codes about the aim and importance of the lesson subject is given.

Table 8

'Aim and Importance of the Subject' codes, keywords, and themes integration

Reality	Reflection on life	
	Related to life functions	
	Active use	Based On Real Life
	Capable of using in professional life	
	Making them aware of the need for knowledge in life	(Theme 7)
	Life oriented	
Reason	Why to learn	
Society	Culturally significant	
Critical Thinking	Being a critical thinker	Based On Skills (Theme 8)
Media Literacy	Important to be able to evaluate media	
Objectives	Effective on evaluation	
	Teaching the subject	
	Justifying the content	Based On In-Class Dynamics
	Parallel with the objectives	
	Making the learners gain background for self-study	(Theme 9)
Ways to convey	Not clear; through discussion	
	Through sample cases	
Order of Importance	Ordering the aims of the subject as the significance	

Aim and Importance of the Subject Based on Real-Life. Participating academics have produced 10 well-structured codes (2.94%). Of these codes, the most dominant keyword is *reality* (35 %).

Aim and Importance of the Subject Based on Skills. Participating academics have produced 2 well-structured codes (0.58 %). Of these codes, the keywords are equally expressed, and they are *critical thinking* (5 %) and *media literacy* (5 %).

Aim and Importance of the Subject Based on In-class Dynamics. Participating academics have produced 8 well-structured codes (2.35 %). Of these codes, the most dominant keyword

is *objectives* (25%).

All the participants acknowledge that the subject they choose for their lessons should be of high importance and add that they think of the relation between the aim and importance of it. From the thematic analysis, it seems that the participants attribute the biggest importance to the connection between class and real life. Participant number 5, for example, has mentioned that:

> The materials and resources I use should be functionally useful, that is, useful in a contextual format. I believe there must be something related somewhere in your life. Otherwise, it will be a subject that he will never use, that he will have no interest in his life.

On the contrary, according to a group of participants, deciding what to cover is important because of the pre-set objectives of the course. Participant number 7 has formed a sample as follows:

> The aim and importance of a course are surely related. The aim is to teach the content, and sequencing the objectives according to your content is important.

Still, another group of academics take the importance of academic skills and focus on high-order skills of critical thinking and media literacy. To illustrate, Participant Number 4 thinks that:

> True content should be justified by learners, not only by me.

Main Themes for the Teaching Strategies. For this part of the research, academics' perceptions of their teaching strategies are given in Table 9.

Pre-determined Teaching Strategies. Participating academics have produced 65 well-structured codes (19.11 %). Of these codes, the most dominant keyword is *instrument* (56.25%) referring to in-class educational tools. The least focused key concept is *environment* (1.56%).

Flexible Teaching Strategies. Participating academics have produced 4 well-structured codes (1.17 %). Of these codes, the only keyword is *dynamism* (6.25%).

Academics are in high need to think about their pre-set educational conditions, such as the curricular objectives and available instruments. From a larger perspective, their personality traits and the teaching approaches they are used to are also primary reasons for their pre-determined teaching strategies. Participant number 4 elaborates on teaching strategies as:

> Teaching strategies are my tools to clarify input that exists for a curricular purpose.

Table 9

'Teaching Strategies' codes, keywords, and themes integration

Approach oriented	Experiences and analysis Constructivist; no certain knowledge Learner-centred Letting self-discovery	Problem-solving Trial-error Proof-based Applied strategies Integrated manner		
Instrument oriented	Experiments Data collection Variety in sampling Role-play Brainstorming Discussion Evaluation Assignment	Case study Instruction & Presentation Repetition Question-answer sessions Debate Group work	Instant feedback Dramatization Clinic training Laboratory Technology based tools Observation Writing questions	Pre-Determined Teaching Strategies (Theme 10)
Objectives oriented	Understanding the content Conceptualizing Visualizing the content Systematizing Concretising	Planning from general to specific Compensating for the missing Linking with prior knowledge and experience Bridging between subjects		
Based on Personality Traits	Teacher Modelling Affected by own Learning	Learner Able to speak more Similar profiles		
Based on Environment	Reducing the affective filters Communicative			
Dynamism	Not pre-set Having alternatives Subjective paradigm Shaped by the group			Flexible Teaching Strategies (Theme 11)

Interestingly, a group of academics realizes that their approach to strategy choosing results from their own learning experiences. For their teaching strategies, the first thing obvious is their flexibility. However, a minority group of participants think teaching strategies are a subjective paradigm and are shaped by learners' profiles all the time, just as in their educational past. Participant number 1 has put forward the case as:

> All the methodology I include in my class is based on learners' profiles and are reshaped all the time, even if it means there is no methodology. I do feel safer that way as I experienced such flexibility myself as a learner.

Main Themes for Evaluation. For this part of the research, the academics' evaluation practices are analysed, and the results are shown in Table 10.

Table 10

'Evaluation' codes, keywords, and themes integration

Motive for Evaluation. Participants have produced 39 well-structured codes (11.47 %). The most dominant keyword is *instrument* (56.41%). For the academics whose evaluation practices are process-oriented, the most meaningful parts are *why* and *how to* evaluate learners' success levels as well as *what to use* as the evaluation tool. During this process, the golden rules are to cover all students regardless of their differences in learning styles and to give well-qualified feedback. When it is the product-oriented group of academics, limits seem to be more clear-cut. Limits are certainly within the boundaries of certain subjects and pre-set goals and skills. Moreover, there is a need to compare students and order them, if possible, to make the evaluation as standard as possible. This study also has data to understand whether the academics are open to modifying a part of their evaluation practices. They, in fact, are quite critical of their evaluation process. However, it only depends on the reason that they decide what part to change. For example, one sample from Participant Number 7 explains the change as follows:

	Process	*Product*
Meaning	Applied process	Questioning the concepts
	Life Transfer	Comparing students
	Test of effort and appropriateness	Pre-set & Clear-cut
	Internalizing	Based on the subject area
Instrument	Design/product	Experiment
	Group work	Open-ended questions
	Project	Presentations
		Based on the learner profile
Sign of Achievement	Observation forms	Observation forms
	Peer evaluation	Reports
	Communicative feedback	Critical thinker
	Covering all the students	Problem solver
	Self-evaluation reports	Learning

Motive For Evaluation (Theme 12)

Process - Oriented | Product- Oriented

> I see they get used to it or the exam system expires or sometimes a new technique is needed. For example, I have recently started to use inquiry-oriented techniques in my laboratory practices. I definitely include the guess, observe, and explain the method. My previous ones were more on science process skills because it is our most basic method. But as new models become integrated, I pay attention to using them as well.

Main Themes for Re-Organization. For this part of the research, the data are analysed to

understand under what conditions any teaching practice is re-organized by academics and the results are as below:

Table 11

'Re-organization' codes, keywords, and themes integration

Why	Feedback	
	Course evaluation questionnaires	
	Variety of learners' profiles	
	Consensus with the stakeholders	
	Following the graduates	
	Self-evaluation	
	Based on exam scores	
When	When the content is not motivating	Reasons To Re-Organize
	When the understanding is hard	
	When things are too repetitive	(Theme 13)
	When things are outdated	
	When there is a new method	
	When the questions are not clear	
What	Rubrics	
	Methods	
	Content	
	Instruction strategies	
How	In an organized manner	

Reasons to re-organize. Participating academics have produced 22 well-structured codes (6.47 %). Of these codes, the most dominant keyword is *why* (45.45%) referring to the reasons for re-organization. The time of change is also important for academics. Having a strong reason and at the right time, they seem to be in harmony with any change in their teaching practices. To illustrate, participant number 8, for example, focuses on the strongest reason and the best time as:

> Whenever I need to reinforce interaction in my class, I get feedback for possible strategies from my learners and most of the time I re-organize the content.

'Relational Factors' Category

The third category of data is the *relational factors,* which are realized to be shaped by teacher and learner in the first place and by other factors in the second. How they justify their teaching practices by other factors is what is meant by secondary. Participants have produced a total of 59 codes. 30 codes for the successful relationship between teacher and learner, and 29 codes are for other relational factors. Accordingly, a sum of 27 keywords is obtained. The information in terms of frequency and percentage distribution is as follows:

Table 12

Frequency and percentage values regarding relational factors

Successful Relationship	*f*	*%*	*Other Relational Factors*	*f*	*%*
Communicative	1	3.33	Quality of education	2	6.89
Emotional balance	1	3.33	Personal relations	2	6.89
Common interests	2	6.66	Institution	3	10.34
Motivation	4	13.33	Learner	4	13.79
Fault-tolerant	1	3.33	Motivation	6	20.68
Close	3	10	Feedback	3	10.34
Flexible	1	3.33	Teacher	2	6.89
Rapport based	1	3.33	Content	3	10.34
Like father-son	1	3.33	Sign of success	4	13.79
Dynamic	1	3.33			
Like peer relation	1	3.33			
Reciprocal learning	3	10			
Pre-set rules	2	6.66			
In line with the objectives	1	3.33			
EQ	2	6.66			
IQ	1	3.33			
Aware of the other	2	6.66			
Exchanging roles	2	6.66			
Total:	30 Codes		Total:	29 Codes	

Thematic Organization of Findings for Relational Factors

Of the 59 codes produced for the third category (relational factors) of the research, 27 keywords as concepts are identified (*see Table 12*). 18 keywords related to the successful relationship between teacher and learner are grouped under 1 central theme with 2 keywords. 9 keywords related to other relational factors are grouped under 3 main themes.

Main Themes for The Successful Relation Between Teacher and Learner. For this part of the research, the responses focusing on the criteria of a successful relationship between a teacher and a learner are analysed and the results are as shown in Table 13.

Characteristics of a Successful Relationship Between Teacher and Learner. The theme is analyzed into 2 keywords as the *relationship itself* and the *people included*. Participating academics have produced 22 well-structured codes (6.47 %) about the characteristics of the relationship and 9 well-structured codes (2.64 %) about the people included. Of these codes, the most dominant is *motivation* (13.33%).

Table 13

'Successful Relation' codes, keywords, and themes integration

Characteristics of relation	Communicative	Characteristics of a Successful Relationship (Theme 14)
	In line with the objectives	
	Emotional balance	
	Common interests	
	Motivation	
	Fault-tolerant	
	Close	
	Flexible	
	Rapport based	
	Like father-son	
	Dynamic	
	Like peer relation	
	Reciprocal learning	
	Pre-set rules	
Characteristics of people	EQ	
	IQ	
	Exchanging roles	
	Aware of the other	

Within the relational factors, the most important thing affecting a learner-teacher relationship seems to be *the characteristics of the relationship* itself and, specifically, how *motivating* it is. According to Participant Number 9, the best relationship is represented below:

> For example, how a person learns something, how he is motivated to learn, motivation. We can teach a student by giving him candy when he is a small child, but I can't give candy to an older person who has barriers against learning a language. In other words, there needs to be a process, an interaction, which I believe can be successful by finding the sources of motivation and proceeding accordingly.

Participant number 6, for instance, used a *father-son* metaphor, and, another participant (participant number 3) used *peer relation* as a similarity. A deeper analysis of the participants' deciphered interview has revealed that the father-son relation is based on the strict but relaxing nature of a father-son relation and peer relation focuses on understanding the nature of such a friendship. This participant (number 2) thinks that:

> a good relationship between a teacher and a learner is one that is not hierarchal.

Supported by good nature, a teacher and a learner may have a successful relationship if they have enough intrapersonal and interpersonal skills such as EQ and awareness of the other self, according to a group of academics. Participant number 8 considers:

> a good relationship occurs only when they are the kind of people who know how to criticize and talk to each other.

Main Themes for the Other Relational Factors. For this part of the research, academics' responses are analyzed in terms of other relational factors that are possibly affecting their practices and helping them justify their strategies and the results are shown in Table 14.

Relational Factors Based on People. Participating academics have produced 17 well-structured codes (5 %). Of these codes, the most dominant keyword is *motivation* (20.68%). According to participant number 1, *motivation* is linked with *interest*:

> motivation levels of learners increase in line with their interest in a topic.

Relational Factors Based on Conditions. Participating academics have produced 5 well-structured codes (1.47 %). Of these codes, the keywords are almost equally important. They are *institution* (10.34%) and *quality of education* (6.89%). Participant number 5 has focused on the role of an institution in identifying learner profiles and grouping them accordingly, saying that:

> The responsibility for understanding the learner differences belongs to the institution. Only then should I be responsible for in-class success.

However, the institution the participant works for has a system of categorizing students according to their levels of proficiency and a placement test, which is the most significant rationale for such an expectation.

Relational Factors Based on the Teaching-Learning Process. Participating academics have produced 7 well-structured codes (2.05 %). Of these codes, the keywords are s*igns of success* (13.79%) and *content* (10.34%), and they are highly related according to academics. In addition, within the teaching-learning process, the *content* is observed to be efficient in so many aspects of teaching that even the worries for learners' professional future and society's needs are addressed through it. To exemplify, Participant Number 1 has mentioned:

> content that I choose has to be in relation to society's needs in terms of the economy; otherwise, it is not worth mentioning in class.

Table 14

'*Other Relational Factors' codes, keywords, and themes integration*

Personal Relations	Close relationship and success
	Aim of the education and relation between teacher-learner

Learner	Learner profile and aim	
	Learner profile and content	
	Learner responsibility and successful teaching	
	Learner product and successful teaching	
Motivation	Teaching and psychology	
	Motivation and attendance	
	Motivation and relation between teacher-learner	Based On People
	Deduction and motivation	
	Motivation and exams	(Theme 15)
	Motivation in applied education and teacher profile	
Feedback	Oppositions and successful relationship	
	Expressing oneself and successful teaching	
	Problem-solving skills and successful teaching	
Teacher	Disciplined teacher and completion of learning	
	Self-improvement of teacher and feedback	
Quality of Education	Education Faculties' ill-training	Based on Conditions
	Focus on evaluation because of one-way communication	
Institution	Responsible for different learner profiles	(Theme 16)
	Differentiating learners according to age	
Sign of Success	Professional life skills and success	Based on the Teaching-Learning Process
	Being knowledgeable and success	
Content	Objectives and content	
	Content design and feedback	(Theme 17)
	Content and learner-centeredness	

Discussion and Conclusion

The present research examines the perceptions of the participating academics to reveal what is underlying their teaching practices and primarily results in obvious findings when aligned with research questions. It should be noted that to explain such a complex process from a broader perspective, some categories are needed as pillars. The complex structure of perceptions is clearly seen in the multidimensional responses and so in codes produced by the participating academics. They have created a wide array of codes, keywords, and themes related to the categories of this study. A total number of 342 codes are conceptualized in 77 keywords, 17 themes, and 3 categories. The dominant category with the highest number of codes is *methodology*. Besides, the dominant sub-category is the *actions* that the academics take regarding their *teaching strategies*. Core factors about academics' perceptions within the data are obvious in terms of the *teaching-learning process*, *methodological applications*, and *relational elements* influential in classrooms.

Compared to existing literature, this study may contribute with further details at some points. Analysis of participant comments reveals that in the eyes of the academics, the

characteristics of a teacher and classroom dynamics are essential to think about. Commitment to learners and improvement of the educational system are what give academic persistence to carry on. Holding the belief that their perceptions may positively or negatively affect learners, they try to make a difference through their decisions. One obvious finding of the study, in this instance, is about the role of teachers. What Klemm (2007) mentions is related to the role of teachers which is that teachers should not make their learners memorize the knowledge after obtaining it from a single source. Golding (2013) also puts forward that the teacher should be a guide on the way to knowledge, not the role of source and distributor of knowledge. Although this study reveals data supporting Klemm (2007) and Golding (2013), it also puts forward that teachers may sometimes be the only source of knowledge responsible for knowledge distribution as they think themselves to be the most capable people in a class. Thinking of learner-centeredness, academics mainly seem to transfer content to students, while students are passive. Students in a classroom just listen and take notes. This also contradicts Mji (2003) in that placing a teacher at the center of instruction provides very little space for learners' contribution to the teaching and learning process. As a result, it would not be wrong to mention although academics are aware of the importance of learner-centeredness and how they can employ it as a teacher and a teaching strategy, they do not always practice it in classroom situations.

What academics do in line with their perceptions is clear from their methodological applications. As ways to improve teaching practices must also be a discussion point, the use of academics experiences is of benefit. Developing in-class practices allowing learner engagement in learning experiences and designing quality in-class experiences with discussion and reflection enables academics to nurture their learners. It is also clear that academics are inclined to adopt a certain point of view that leads their practices. The related views in this study appear to be process and product-oriented. The differentiating point between these two sides is the connection level of learners' knowledge with their real-life situations. Although it is not possible to claim that process-oriented approaches are ignorant of real-life extensions, they seem to spend all their effort on *how to learn* while the product-oriented approaches do the same for *what for.* The Organisation for Economic Co-operation and Development [OECD] (2005) defined an *ability to meet complex demands* as a competency, and it has actually referred to a twenty-first-century skill as a capacity to use knowledge, attitudes, and skills to meet real-life challenges. In line with this transformation of the competency defined here, *what for* seems to be earlier in order of importance. Within this study, the same differentiation between the

points of view is clear within evaluation strategies. The amount of data received for both *how to assess* and *what for* is equal in terms of evaluation. In other words, academics pay attention to both sides when it is the teaching approach and assessment. However, related to real-life extension, as it is another whole concept, more data based on teaching and evaluation strategies may be needed for a deeper understanding.

The comments by the participating academics are in line with the findings of Weibelzahl and Kelly (2005) in terms of the signs that identify the teaching-learning process as successful and they are mainly about professional life. Weibelzahl and Kelly (2005) have written about the ways that course content satisfies students' personal and/or career needs and goals and the level of this satisfaction as being a solid sign of success. Being successful in the workplace is one of the leading signs. Most participating comments, in addition, reveal that having a learner successful in work is an undebatable sign of good in-class practices. To elaborate, the educational outcome is mostly needed if it is in line with the desired behavioural consequence on a social basis. The actions taken by the academics, thus, are justified according to them as long as they help learners improve themselves and become a successful member of the community. In other words, education has the strongest link with society according to academics' perceptions.

Regarding the results of this study, it may be claimed that the ideas of academics need to be based on more engaged experiences and higher levels of exposure to course planning. As it is put forward, 'the way the concept is perceived reflects the approach towards teaching practice itself' (Lunenburg & Ornstein, 2008). In this case, this research, which is on the perceptions of teaching practices, helps get some clues about in-class dynamics and their complex nature, revealing the need for academics to be in more profound engagement with the planning process of teaching practices as well as evaluating and renovating them whenever appropriate.

Conflict of Interest

The authors declare that they have no competing financial or non-financial interests.

References

Amparo, A.R., Smith, G., & Friedman, A. (2018). Gender and persistent grade performance differences between online and face-to-face undergraduate classes. In T. Bastiaens, J. Van Braak, M. Brown, L. Cantoni, M. Castro, R. Christensen, G. Davidson-Shivers, K. DePryck, M. Ebner, M. Fominykh, C. Fulford, S. Hatzipanagos, G. Knezek, K. Kreijns, G. Marks, E. Sointu, E. Korsgaard Sorensen, J. Viteli, J. Voogt, P. Weber, E. Weippl & O. Zawacki-Richter (Eds.), *Proceedings of EdMedia: World Conference on Educational Media and Technology* (pp. 1935-1939). Amsterdam, Netherlands: Association for the Advancement of Computing in Education (AACE). https://www.learntechlib.org/primary/p/184430/.

Armstrong, D. A. (1968). *Materialist theory of mind.* Routledge & Kegan Paul. http://library.lol/main/5DB1BAD6A8BC706E6E7775D044F3C599

Bantwini, B. D. (2010). How teachers perceive the new curriculum reform: Lessons from a school district in the Eastern Cape Province. *International journal of educational development*, *30*(1), 83-90. https://www.researchgate.net/publication/222367042_How_teachers_perceive_the_new_curriculum_reform_Lessons_from_a_school_district_in_the_Eastern_Cape_Province_South_Africa

Brodie, K. (2006). Teaching Mathematics for Equity: learner contributions and lesson structure. *African Journal of Research in Mathematics, Sciences and Technology Education,* 10(1), 13–24.

Glaser, B., & Strauss, A. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research.* Sociology Press.

Glesne, C. (2016). *Becoming qualitative researchers: An introduction.* 5th ed. Pearson Education.

Golding, C. (2013) The Teacher as Guide: A conception of the inquiry teacher. *Educational Philosophy and Theory, 45*:1, 91-110, DOI: 10.1080/00131857.2012.715387

Gulliksen, M. S., & Hjardemaal, F. R. (2016). Choosing content and methods: Focus group interviews with faculty teachers in Norwegian pre-service subject teacher education in design, art, and crafts. *Scandinavian Journal of Educational Research*, *60(1),* 1-19. https://www.tandfonline.com/doi/pdf/10.1080/00313831.2014.967809?needAccess=true

Hinchman & Lalik (2000). Power-knowledge formations in literacy teacher education: Exploring the perspectives of two teacher educators. *The Journal of Educational Research:93*,3,182-191.https://doi.org/10.1080/00220670009598706

Honan, E., & Mitchell, E. (2016). "Preparing teachers of English and literacy: conflicting expectations." *Literacy Learning: The Middle Years*, vol. 24, no. 3, Oct. 2016, pp. 19+*Gale Academic*

OneFile, link.gale.com/apps/doc/A468771611/AONE?u=anon~85068a4b&sid=googleScholar&xid=77a3ac0b. Accessed 24 Oct. 2022.

Kalaycı, N., Watty, K., & Hayırsever, F. (2012). Perceptions of quality in higher education: a comparative study of Turkish and Australian business academics. *Quality in Higher Education*, *18*(2), 149-167. https://www.researchgate.net/publication/254334857_Perceptions_of_quality_in_higher_education_A_comparative_study_of_Turkish_and_Australian_business_academics

Kober, N. (2015). *Reaching students: What research says about effective instruction in undergraduate science and engineering*. In available from The National Academies Press at http://www.nap.edu/catalog.php?record_id=18687. https://doi.org/10.17226/18687

Klemm, W. R. (2007). What good is learning if you don't remember it? *The Journal of Effective Teaching, 7*(1), 61-73. https://files.eric.ed.gov/fulltext/EJ1055665.pdf

Lunenburg, F.C., & Ornstein, A.O. (2008). Educational Administration: Concepts and Practices. Wadsworth, Thousand Oaks.

Marsh, C. J., & Willis, G. (2003). *Curriculum: Alternative approaches, ongoing issues*. Pearson Merrill Prentice Hall. http://mehrmohammadi.ir/wp-content/uploads/2021/08/Curriculum_-Alternative-Approac-Colin-J.-Marsh.pdf

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. 2nd ed. SAGE Publications. http://library.lol/main/F3B942234A4F871DABBBCE6AC7CA928E

Mji, A. (2003). A three-year perspective on conceptions of and orientations to learning mathematics of prospective teachers and first-year university students. *International Journal of Mathematical Education in Science and Technology,* 34(5), 687–698. https://www.researchgate.net/publication/250891422

Myers, J., & Paulick, J. (2020). Examining Decision Making in Higher Education: A Study of Teacher Educators' Choices within Writing Methods Courses. *The Excellence in Education Journal*, *9(1)*, 5-31. https://eric.ed.gov/?id=EJ1246798

Nyaumwe, L., Bappoo, R., Buzuzi, G., & Kasiyandima, O. (2004). Students' perceptions of factors and gender differences that influence their achievement in 'O' level Mathematics in Mashonaland Central Region. *The Zimbabwe Bulletin of Teacher Education*, 13(1), 21–39.

Organisation for Economic Co-operation and Development. (2005). OECD Annual Report. Paris: OECD Publishing. https://doi.org/10.1787/annrep-2005-en

Snow, C. E., Griffin, P., & Burns, M. S. (2005). Yet Another Report About Teacher Education? In C. E. Snow, P. Griffin, & M. S. Burns (Eds.), *Knowledge to support the teaching of*

reading: Preparing teachers for a changing world. CA: Jossey-Bass. https://eric.ed.gov/?q=ED498541&id=ED498541

Walters, K., Smith, T. M., Leinwand, S., Surr, W., Stein, A., & Bailey, P. (2014). *An Up-Close Look at Student-Centered Teaching.* Nellie Mae Education Foundation, 1–8.

Weibelzahl, S. & Kelly, D. (2005). *Adaptation to Motivational States in Educational Systems*. 80-84. In Conference: Lernen, Wissensentdeckung und Adaptivität (LWA) 2005, GI Workshops, Saarbrücken, October 10th-12th, 2005. https://www.researchgate.net/publication/221147080_Adaptation_to_Motivational_States_in_Educational_Systems