RESEARCH ARTICLE

Deterring cheating using a complex assessment design: A case study

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Abstract

Attempts to translate written examinations normally conducted in a lecture hall to an online environment during emergency remote learning in response to COVID-19 have not proved entirely successful, and have led to a sharp increase in cases of suspected misconduct. This paper describes a case study which gives insights on the relationship between assessment design and academic integrity: Is it possible to deter students from cheating by means of assessment design? Previous research does promote certain assessment types, but also indicates that there is no single assessment type that students think is impossible to cheat on. The solution proposed in this paper is therefore to add complexity to the mixture. An alternative complex assessment design comprising several steps is introduced and exemplified by an assessment procedure piloted in a grammar course for preservice language teachers in mother tongue tuition. The design promotes academic integrity, signature pedagogy, student-centred learning, and collaboration within a community of practice in an online setting.

Keywords

Academic integrity; contract cheating; preservice education; mother tongue tuition; Serbian; Croatian; Bosnian

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Introduction

Academic integrity and assessment design in online learning

Internet-based learning delivered in a course form using a learning management system is known under many names. The terms online learning, e-learning, and distance learning, among others, are used somewhat inconsistently (Moore et al., 2011). In this paper, the terms online courses/learning and distance courses/learning are used interchangeably.

Several studies have found online language learning to be as effective as face-to-face learning (F2F) (Enkin & Mejías-Bikandi, 2017; Goertler & Gacs, 2018;

Moneypenny & Aldrich, 2016; Salcedo, 2010), including one that evaluated and compared oral proficiency between those two modes of delivery (Blake et al., 2008). Instructional design (Cheng, 2015) and collaborative technology-mediated tasks (González-Lloret, 2020) have been used to promote productive language output and interaction between students. Online-delivered courses require careful planning of the course structure, feedback, and assessment (Karttunen & Juusola, 2019), but can increase students' engagement and independence as well as their digital literacy skills (Pardede, 2019).

However, providing emergency remote teaching (ERT) in response to a crisis is an extraordinary situation that is quite different from well-planned online teaching (Gacs et al., 2020; Hodges et al., 2020). Many teachers have been forced to cancel all F2F classes and transfer course content to an online environment in a matter of weeks or days. The main goal was to provide a provisional and temporary solution for delivering instruction and content to students, and the main method was creative problem solving in a period when normal faculty support was not dimensioned to meet the sudden increase in demand (Hodges et al., 2020).

The outbreak of the COVID-19 pandemic has not affected all higher education teaching in the same way; many courses were held completely online even before the pandemic. This paper discusses the relationship between the design of assessments in online language courses and academic integrity, based on the experiences from a planned online grammar course that is a part of a mother tongue tuition programme for L1 students in Sweden. Even though such a planned learning experience is quite different from ERT, sharing the experiences from planned online courses might be helpful to teachers forced into ERT to redesign their assessments in order to ensure academic integrity when teaching and learning is conducted remotely.

The transition to online teaching and learning due to unforeseen circumstances has led to attempts to translate traditional examination formats used in lecture halls and other F2F environments to an online format. Because classroom testing was not possible, and invigilated assessments were not an option, safeguarding academic integrity became a challenge (Gamage et al., 2020; Reedy et al., 2021). In addition, many so-called "study aid" tutoring sites such as Chegg and Course Hero have

emerged during the pandemic to help students with their take-home exams (Lancaster & Cotarlan, 2021).

However, the interruption also created an opportunity to rethink the assessment strategies (Fuller et al., 2020). Although remote proctoring can reduce cheating (Karim et al., 2014), earlier attempts to deliver proctored summative examinations online have been shown to pose challenges for students (James, 2016) and require the implementation of a range of additional procedures (Medina & Castleberry, 2016), something that was not possible to implement immediately during the ERT. In addition, at many universities in Sweden, monitoring via video service during remote written examinations was only allowed in exceptional cases, as it is perceived as an intrusion into students' privacy.

Difficulties with monitoring, the time constraints on developing alternative assessment strategies, and a lack of information about online assessment can be seen as the reasons behind a marked increase in the cases of misconduct reported to the disciplinary boards at universities in Sweden in 2020, the number increasing from 1,528 cases in 2019 to 2,466 in 2020 ("UKÄ", 2021). Three fourths of Swedish higher education institutions believe that the increase is connected to the ERT caused by COVID-19. The nature of the reported cases has also changed. Although plagiarism is still the most prevalent cause of reporting, the proportions of the causes have changed. Compared to the previous year, plagiarism has decreased during the pandemic from 68% to 54% of all reported cases, while reports of unauthorized collaboration have sharply increased from 9% to 31% ("UKÄ", 2021).

In Sweden, the pandemic has also led to an emerging commercial contract cheating market that has become more aggressive during the pandemic (Bjelobaba, forthcoming). Contract cheating, a term originally coined by Clarke and Lancaster (2006) to describe the outsourcing of coursework to a third party, is a growing concern among higher education institutions: a meta-analysis of self-reported contract cheating cases shows a historical average of 3.52%; the analysis of the samples from 2014–2018 suggests that 15.7% of students have paid someone else to do their coursework (Newton, 2018). The scale of the problem differs in different countries, and while Sweden's low levels of commercial contract cheating make it an outlier,

compared to other countries where it is more established, Swedish students do take help from family and friends (Bjelobaba, 2019). As contract cheating is not distinguished as a separate category in the national statistic in Sweden ("UKÄ", 2021), the consequences of the pandemic in that respect are unclear.

Although faculty who do not teach online often assume that online education facilitates cheating (Kennedy et al., 2000; Yates & Beaudrie, 2009), online education per se is not necessarily the reason behind the increase in misconduct during the ERT. Research done before the COVID-19 ERT has shown mixed and inconclusive findings regarding the prevalence of academic misconduct in online education. While some studies have found that students do cheat more often in online learning environments than in F2F (Lanier, 2006; Lucky et al., 2019; Miller & Young-Jones, 2012), a large body of literature indicates that distance students engage in misconduct to the same extent (Harris et al., 2020), or even much less than their on-campus peers (Bretag, et al., 2019a; Hart & Morgan, 2010; Kidwell & Kent, 2008; Stuber-McEwen et al., 2009), and that the concerns about increased cheating in unsupervised online assessments are not supported (Beck, 2014; Ladyshewsky, 2015; Yates & Beaudrie, 2009). Academic misconduct occurs in both settings, and students do not always consider their behaviour, such as using notes during an exam, to be cheating (Burgason et al., 2019).

Misconduct is inversely proportional to the maturity of students (Bertram Gallant et al., 2015). As students in online courses tend to be more mature than traditional campus-based students, they tend to cheat less (Harris et al., 2020; Miller & Young-Jones, 2012). However, as ERT has forced all students online, such a difference was no longer valid, and may be part of the explanation of why ERT has entailed such a sharp increase in misconduct cases in Sweden. A recent study in Australia has shown that younger students assumed that cheating was easier in an ERT online setting (Reedy et al., 2021). In addition, the ERT has forced students and teachers into an online environment without training and experience in such settings, and in some cases, as Eaton points out, against their will, which might also have affected academic integrity (Eaton, 2020).

Higher education institutions in Sweden have adopted a range of measures during the COVID-19 pandemic to prevent misconduct. Guidelines and

recommendations for distance examinations have been developed at several institutions, and the units for teaching and learning in higher education offered their help with the assessment design ("UKÄ", 2021). Pedagogical approaches and examination strategies were also frequently discussed in different teacher forums and groups in social media.

Effective online teaching requires more than just transferring the content to an online environment. The medium of instruction requires adaptation on the part of students and teachers alike, but also offers new possibilities, making it difficult to compare a completely online learning environment with a F2F setting. The role of the teacher shifts to coaching, and learners are more active (Boettcher & Conrad, 2016, pp. 8–9). Using similar assessment types as in F2F education, such as proctored, closed-book tests, is possible but not advisable, as formative and continuous assessment has clear pedagogical advantages in an online medium (Moallem et al., 2005), and also reduces cheating and other forms of misconduct (Boettcher & Conrad, 2016, p. 10). In addition, the medium enables new forms of assessment that are not applicable in the traditional classroom, such as the development of video for educational purposes.

Assessment design is usually seen as an area where effective strategies can be implemented to reduce cheating (Bertram Gallant, 2017; Hodgkinson et al., 2016; Olt, 2002). Frequent formative assessment has been proposed as a way to deter academic misconduct (Nguyen et al., 2020; Simonson et al., 2019). Other suggested approaches were to modify the assessment format in order to minimize cheating by focusing on novel and/or higher-order-thinking questions (Nguyen et al., 2020; Reedy et al., 2021), using writing-based and collaborative assignments, case studies, and online debates (Burgason et al., 2019), implementing authentic assessment (Ellis et al., 2020; Simonson et al., 2019), and assessing the knowledge on academic integrity and the referencing technique (Bjelobaba, 2020).

Nevertheless, findings from a large Australian study indicate that there is no assessment type that students see as impossible to cheat on: at most, some types of assessment can reduce cheating, for instance in-class tasks, personalized and unique tasks, oral examination, and reflections on practical placements (Bretag et al., 2019b).

There is a risk, however, that belief in the integrity of such exams can create a false sense of security (Harper et al., 2021).

While teacher training can give opportunities to develop assessment designs that are harder to cheat on, assessment redesign requires time that not all teachers have (Slade et al., 2019). Furthermore, some of the assessment types that can safeguard academic integrity work best if the number of students is not high. One way of dealing with a large number of students is to extend the use of peer-assessment in smaller groups. Instead of actively participating in all groups, teachers can provide students with protocols and move between the groups answering questions and providing comments. Previous research has shown that giving and receiving peer feedback can positively influence students' writing performance (Huisman et al., 2018, 2019), promote language learning (Peeters, 2018), encourage silent students to participate in discussion (English, 2007), and encourage critical reflection and self-assessment (Altınay, 2017).

As mentioned, reports of unauthorized collaboration are on the rise in Sweden ("UKÄ", 2021). There are of course several ways to deal with that issue, including tighter monitoring, but one way of dealing with this problem in an online environment is to create more spaces for authorized collaboration where collaborative activities can be used to foster learning.

Wenger (1998) explains that learning can be viewed in two ways. When it is considered a solitary endeavour, where knowledge is usually tested and demonstrated individually, collaboration is seen as cheating. Another way of viewing learning is as a social phenomenon, dependent on the collaboration within communities of practice. The role of teachers is then to organize a student-centred space for learning and scaffold the creation of the community of practice, a community "created over time by the sustained pursuit of a shared enterprise" (Wenger, 1998, p. 45). Members of a community of practice develop competencies through three structural elements: accountability to a joint enterprise, mutual engagement, and a shared repertoire of joined resources (Wenger, 1998, p. 49). Because collaboration is seen as a necessary part of the learning process, it is not automatically dismissed as cheating. In an online course, building a sense of community can reduce dropout rates (Rovai, 2002) and

feelings of isolation (Croft et al., 2010; Stoytcheva, 2021). The main factor in building such a community is the creation of collaborative activities and tasks.

Although there is no single assessment type that is impossible to cheat on, in this paper I will argue that combining several different assessment strategies into a complex assessment could get us closer to such a solution. Such an assessment would include individual as well as collaborative steps and provides both teacher and peer scaffolding (Belland, 2017). As a case study, an example of a complex assessment design that can reduce misconduct in online language courses is described and discussed. This particular example was used in the mother tongue tuition teacher training in Sweden.

Mother Tongue Tuition Teacher Training in Sweden

According to the Swedish Education Act (2010:800), Mother Tongue Tuition (MTT) offers children in primary and secondary education who speak another language than Swedish at home the opportunity to receive L1 as an elective course as well as tuition in their mother tongue. Courses in MTT are elective, with small but heterogeneous groups of children with varied levels of L1 competence. Providing pupils with MTT has been a challenge for many schools in Sweden due to geographical distances, and therefore, since the Education Act (2015/16:173) was amended to allow remote tuition in MTT, research efforts have been underway to develop remote teaching strategies (Pettersson & Hjelm, 2020).

Since 2018, Uppsala University offers 30 ECTS (European Credit Transfer and Accumulation System) programmes for mother tongue tuition teachers (MTTT) in different languages, including Serbian, Croatian and Bosnian (SCB). Courses within the programme are taught completely online without any campus meetings using Canvas as the learning management system (LMS). The target group is preservice teachers in MTT, as well as active in-service teachers who want to be authorized as teachers in that subject. The programme is therefore closely connected to a profession, as preservice language teachers study these languages as part of their professional development.

Students in the programme have SCB as their mother tongue as well as knowledge of Swedish as a secondary language. The programme is given in Swedish, but in the SCB-specific courses within the programme, both SCB and Swedish are used. The programme consists of six courses, two pedagogical courses given by the Department of Education, and four language-specific courses, including a grammar course for mother tongue tuition teachers in SCB. It is the design of an assessment in the latter course that is discussed in this paper. The grammar course provides an overview of SCB phonetics, orthography, morphology, word formation and syntax, and trains the students to present these categories in Swedish and in SCB in a way that is appropriate for MTT.

Constructive alignment is implemented, meaning that the assessment strategy corresponds to learning outcomes and learning activities in the course (Biggs, 1996, 2003; Biggs & Tang, 2011). The assessment is designed to evaluate one of the learning outcomes of the course Grammar for Mother Tongue Tuition Teachers, namely: "After completing the course, the student shall be able to present Serbian, Croatian, Bosnian grammar in a manner that is appropriate for mother tongue tuition."

The syllabus does not specifically address a possible need for increased knowledge about information and communication technology (ICT). However, considering the amendment to the Education Act, and because the word "manner" can be interpreted that way, the assessment was designed not only to assess students' ability to present SCB grammar in a manner appropriate for the purpose, but also to give the students an opportunity to develop their digital literacy.

Signature pedagogies

Preservice teacher education is a type of teaching that is specific to a particular profession. The aim is not only to develop students' knowledge of the content, but also to prepare them for their future professional activity with such things as pedagogical and didactic applications of the knowledge. Shulman uses the term signature pedagogies to describe forms of teaching used by disciplines to prepare students for their chosen profession by training them in how to think, perform, and act with integrity in their professional life (Shulman, 2005, p. 52). Shulman points out that signature pedagogies require active student participation and interaction with their peers.

While Shulman's focus is on the traditional learning environments, a report from the University of Calgary explores how the notion of signature pedagogies can be applied in e-learning for educators and posits a range of synchronous and asynchronous learning activities that can be used in that context (Eaton et al., 2017). Assessment has been shown to be an area where professional artefacts can contribute to evaluating and forming professional knowledge, including its practical, epistemic, and moral dimensions (Esterhazy et al., 2021).

Method

The type of assessment discussed in this paper was piloted in an online course for mother tongue tuition teachers given twice during the period 2019–2020. Previously, similar online grammar courses for L2 students were assessed as a home-take exam with higher-order thinking questions and short time frame to answer them being the primary method to safeguarding academic integrity. In the course described in this paper, the assessment design for the target group consisting of L1 preservice teachers was developed in order to test a model that would further deter students from cheating. The aim is to implement the similar model in other grammar courses and for other target groups such as L2 students as well. As no single assessment type is considered to be impossible to cheat on, the assessment was designed in several steps with a combination of synchronous and asynchronous individual and collaborative tasks. Furthermore, the steps were chosen to facilitate building of the community of practice as well as to provide students with the opportunity to further prepare for their future profession of MTT teachers.

The feedback from the two cohorts of students in the programme was collected through oral and written course evaluations. The cohorts were very small (3 and 4 students respectively), which made it possible to discuss and develop the pilot assessment for use on a larger scale and in other similar courses in the future.

The complex assessment design: A case study

The complex assessment used as a part of the grammar course for mother tuition teachers contains several steps, as shown in Figure 1. All the steps are provided with written instructions in order to scaffold the learning. The students have

the opportunity to ask questions in an online seminar prior to the assessment, as well as through e-mail or posting questions on the discussion board in the learning management system.

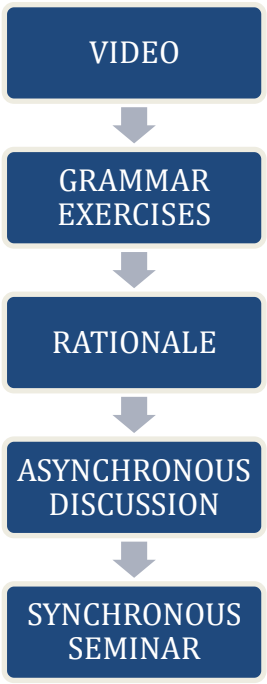

Figure 1. An example of a complex assessment.

Steps 1–3 are performed individually.

Step 1: Video

In the first step, the students are asked to make a video where they present a short grammatical lesson (5–10 minutes). The choice of topic is free. Students are given video instructions on how to produce a video using a smartphone, laptop or video camera as well as instructions on how to upload the video in the learning management system.

The task can be solved in two different ways:

a. A student can film him or herself teaching on campus.

b. A student can create learning materials or a learning activity in a video-lecture format.

In an online seminar prior to the assessment the usage of the video for educational purposes is discussed and the advantages and disadvantages, the aim, didactical and pedagogical implications, as well as the methodology of these two

different solutions are discussed with students. The choice whether they want to film themselves teaching or to create video material is theirs.

Step 2: Grammar exercises

In connection with the video, the students are required to develop grammar exercises in order to practically implement the grammar topics presented in the lesson. To make a good grammar exercise, a student needs to understand the grammar and have a well-developed vocabulary.

Because an online environment makes parallel and joint courses possible, exercises done by preservice teachers have when been tested on the L2 students of the same language to elicit additional feedback on the structure of these exercises.

Step 3: Rationale

In this step, students provide more information on the learning activities they have created with their videos and exercises. The rationale describes the intended context of each learning activity: the target group, the idea behind the activity, choices that have been made, possible problems that can be foreseen, pedagogical considerations, etc. Students are provided with following questions:

- What is the purpose of your learning activity? What is it intended to achieve?
- What target group do you have? What grade is this?
- What does the student group look like? How good is their knowledge of the mother tongue?
- What difficulties may arise during such a lesson?
- What does the rest of the lesson look like?
- How can the module be examined?
- What pedagogical considerations did you have?

The rationale is supposed to be short, around 1 A4 page.

Steps 4–5 are done collaboratively.

Step 4: Asynchronous discussion

The videos, exercises and the rationales are all posted on the Discussion Board in the learning management system. All students provide short comments on the materials, making this step of the assessment a collaborative endeavour. The aim of the asynchronous discussion is to provide peer-scaffolding and to prepare students for the synchronous seminar held in a video conference system (Step 5).

Step 5: Synchronous seminar

At the synchronous seminar, students are given peer feedback on their material. Students are expected to have seen and read all the materials before the meeting. They are also provided with following peer feedback guidelines:

In your comments, the following should be mentioned:

- Overall impression
- Learning object (content): How clear was the purpose? What part of the grammar was covered, were the explanations appropriate for the target group? How are the didactic questions covered: What, Why, How, and Who? Do you have other ideas on how this learning object could be developed?
- Aid: What aids are used and how do they work in relation to the learning object? (PowerPoint presentations and the layout there, whiteboard and how it is arranged, physical materials, music, etc.)
- Voice and gestures: How are voices and gestures used and how do they work in relation to the learning object? (Tone, tempo, posture, gestures, etc.)
- Method: How is the time allocated? What methods are used and how do they work in relation to the learning object? (e.g.: is the overall picture given, is the presenter using examples, metaphors, synonyms, how is the content presented – was it read, demonstrated, animated, was there an interaction with the audience, etc.)

The feedback is guided, as students are provided with a detailed list of instructions on what aspects they should discuss, but there is also space for other comments and suggestions.

Discussion

In the complex assessment design described here, signature pedagogies are used to simultaneously assess students' content knowledge (grammar) and their ability to implement that knowledge in an educational context. One of the aims has therefore been to strengthen preservice teachers' professional role and generative and didactic skills.

The authentic assessment design that was used in the case study was expected to deter students from misconduct (Ellis et al., 2020; Simonson et al., 2019). The authenticity is further empowered by the students' free choice of the content and the aim of their video lectures. Because the video part of the assessment has two different solutions – students can film themselves teaching or produce video material that can be used as a learning activity – the assignment gives students an opportunity to discuss in more general terms the use of video for educational purposes hence developing their digital literacy.

Viewing video of themselves teaching provides the students in preservice teacher education with an opportunity to reflect on how they teach and to adopt an analytic practice for discussing it (Blomberg et al., 2013; Danielowich & McCarthy, 2013; Gibbons & Farley, 2020; van Es et al., 2017).

Video can also be used to create learning materials or develop a learning activity. Students who chose to develop learning materials in video format could for instance plan to use them in online courses or as part of a "flipped classroom". In a flipped classroom, the video-recorded content is usually posted online to be viewed before the class meets, while classroom time is reserved for active learning and deeper discussion of the content (Baepler et al., 2014). Previous research has demonstrated several benefits of using a flipped-classroom approach in language learning (Afzali & Izadpanah, 2021; Moranski & Kim, 2016; Yanto et al., 2020) and these findings are discussed with students prior to this step of the assessment process.

The aim of having the pre-service teachers create a video and grammatical exercises is to have them practically implement their content knowledge, but also to strengthen their ability to develop learning materials, which is especially important in areas where suitable educational materials are lacking, such as in MTT in Sweden.

Moreover, the assessment design has also enabled students to develop their digital literacy competencies as none of the students in this pilot course had previously used self-produced videos for educational purposes. Researchers have noted that video production can be considered a critical digital literacy practice that should be incorporated into preservice teacher education (Watt, 2019). The oral feedback given by students after the assessment indicates that the experience was useful for their further practice as teachers: as some of the students were already working as in-service MTT teachers in primary schools in Sweden, several had to engage in ERT right after their assessment. The digital literacy they developed and the experience they gained during the video part of the assessment made it easier for them to use video as a part of the online course formats they had to switch to for delivering remote education to their pupils. Although video production was planned pre-pandemic, students' ability to implement video production during the ERT gives an additional argument for further incorporation of that digital practice into pre-service teacher education.

A collaborative practice develops gradually (Chang & Windeatt, 2016), and in this grammar course the development had already been facilitated through a range of learning activities prior to this assessment. Steps 4 and 5 in the presented assessment exemplify how the collaboration can be used in the assessment design to further facilitate and strengthen the process of building a community of practice (Wenger, 1998) in an online language course while safeguarding academic integrity (Burgason et al., 2019). These steps focus on the interaction between students and the creation of a space for collaborative learning and meaning creation, reflective knowledge, and identity construction.

The role of the teacher in this assessment is to provide instructions, coach, and scaffold the assessment, while students take the more active role. The teacher's feedback is provided during synchronous seminar in step 5, but first after the peer-feedback was given.

Peer-feedback and peer-scaffolding are common features of many online courses, but in preservice education it can also be used as part of a signature pedagogy. The collaborative analysis of the video lectures and the development of exercises by the preservice teachers provide an opportunity for shared learning about pedagogy and further development of the community of practice (Danielowich & McCarthy, 2013). The feedback process is an integral part of the teachers' role. In order to develop the pre-service teachers' ability to give feedback in an online environment (Espasa & Meneses, 2010; Hernández, 2012), they are trained in steps 4 and 5 to give written and oral feedback to their peers. Double feedback is used because the two forms of feedback differ and complement each other. While written feedback focuses on the product, oral feedback provides an opportunity for additional explanation and revision (van den Berg et al., 2006). The instructions that are provided give structure and focus to the peer-feedback as well as reduced the risk of collusion.

The course was evaluated anonymously in writing, but the discussion was also facilitated in a synchronous form. In the course evaluation, one student gave the following comment, showing appreciation for the signature pedagogy that was used: "It was useful that the tasks for the mother tongue teacher students focused on having us apply the grammatical elements to concrete work steps that are relevant to our professional practice, such as creating tasks for the various components of grammar, and planning and conducting a lesson focusing on a grammatical topic."

After the assessment, academic integrity and the assessment design that was used were discussed in an oral seminar. To the question of whether it would be possible to cheat with this assessment type, all the students answered in the negative. Although the true answer is perhaps not be as categorical as the answer these students gave, the risk of cheating in such a complex assessment model is greatly reduced by using a combination of individual and collaborative tasks, including tasks that are usually perceived as "hard to cheat on" such as video production and the synchronous oral discussion of assignments through peer-feedback.

Conclusion

The increase in suspected cheating during the ERT has highlighted the importance of assessment design for deterring misconduct. In this paper, an example of a complex assessment design that can be used to reduce the risk of academic misconduct is described. Instead of relying on a single summative examination, this assessment strategy uses a complex assessment comprising several steps. In addition, the assessment design in the case study shows how developing digital literacy skills in pre-service education can help the students cope with ERT-related challenges in their profession.

Previous research on assessment types and their relationship to academic integrity has focused on simple assessment types. Because no single assessment type in itself is a bulletproof solution to cheating, adding some complexity to the formula by combining a range of different assessment types might be a good idea. Building a complex assessment includes a range of different steps and scaffold a mixture of different approaches that combine individual and collaborative tasks: depending on the specific subject needs, different tasks could be included in the assessment. Although each of the described steps in itself cannot guarantee that it will be done with integrity, the complexity provides an additional dimension that can deter students from cheating.

The described assessment is above all used to illustrate how complex examination with a mixture of individual and collaborative, synchronous and asynchronous, steps might work. A limitation of the suggested type of assessment is that it might not be applicable for all online language education, in other contexts and fields, or for significantly larger student groups. However, in an adapted form, an assessment that combines different individual and collaborative activities could be used in a range of different contexts, fields, and in varied geographical locations.

Notes on the contributor

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