Introducing and evaluating elements of alignment, congruence and feedback to a MSc programme

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Introduction

It is well-established that congruence and constructive alignment of teaching to university students is an appropriate tool to enhance engagement, motivation, learning processes and outcomes (Hounsell et al., 2005). Furthermore, formative feedback and self-regulated learning can be a means for the students to take control of their own learning (Nicol & Macfarlane-Dick, 2006). Using the case of the course 'Global Health and Diseases', this final project will explore how the introduction of congruence and constructive alignment as well as feedback can influence students' perception of learning.

Background about the case

The course 'Global Health and Diseases' for MSc Global Health students at University of Copenhagen, Denmark, is a nine week course in block 1 for up to 40 students (Health et al., 2021). The course has been a vital part of the MSc Global Health Programme from when the programme was first initiated nine years ago. While I was course coordinator for the first time in the fall of 2021, I have been responsible for a week on global mental health in the course for the previous five years. In conjunction with a methodology course, this is the first course the MSc Global Health students engage in. 'Global Health and Diseases' is an important starting point for the MSc Global Health students in gaining a mutual understanding of what global health entails. During the course, the students are systematically introduced to a new disease or theme, for instance 'non-communicable diseases' or 'mental health'. The format of learning is lectures as well as institutional visits in the Copenhagen area, such as to the UN City.

Problem statement and rationale

While the evaluations of the course (2018, 2019, 2020) have overall been positive, the students bring up two areas of improvement: (i) lack of structure in the course and of individual lectures and (ii) lack of feedback in any form throughout the course (before the oral final exam). To ensure a red thread in the course, it has previously been the ambition to have an overall theme for each week. However, this has previously not always been possible to carry out. Since I was not the course coordinator of this course prior to block 1 2021, I am not entirely sure why. However, it is clear that it is a big task administratively putting the course together, with many busy calendars at play; in 2021 it amounted to 25 different internal and external lecturers, which is similar to previous years. The structure of each lecture has traditionally been reliant on the invited lecturers. There has not been a tradition of systematically making use of Intended Learning Outcomes (ILOs) for each lecture – neither on Absalon nor in class presentations. In 2020, the students highlighted in the final evaluation how:

"(...) By less structured the students mean that some lectures were difficult to follow. The well-structured lectures usually included a table of contents or a similar organizational slide in the beginning to set up the lecture properly, making it then easier to understand and follow. This is helpful so that students understand what the learning objectives are and can then leave the lecture knowing that it was covered."

"These lectures left students confused about what the learning objectives were and didn't feel as though they were properly informed about the topics."

The students thus called for a more transparent approach to the aim of each lecture and ultimately the entire course. Furthermore, this uncertainty possibly also feeds into their perceptions of how they are evaluated. The course is evaluated with an oral exam (summative feedback), of which many of the students are quite nervous for – most are international students and have never been evaluated through an oral exam before. This has previously been the only type of feedback provided. In 2019, students highlighted how:

"Some students mentioned that feedback during the course or even a graded assignment could be useful (also to take of pressure from the oral exam)".

Thus, though the students tend to overall appreciate the course in evaluations, they have over the years especially noted how alignment and congruence throughout the course and for individual lectures could be improved. Furthermore, students have asked for more feedback throughout the course and not only during the final oral exam. The question is thus whether an introduction of elements of alignment and congruence as well as feedback can influence students' perceptions of own learning.

Aim

The aim of this final project was to introduce and evaluate elements of alignment and congruence as well as feedback to the MSc Global Health course 'Global Health and Diseases'.

Theoretical underpinnings

An important part of the course 'Global Health and Diseases' is to find 'common grounds'. As mentioned by Johannsen et al., many educations have a course similar to this (an introductory course) in the initial parts of programmes (Johannsen et al., 2013). Here students are explained about 'basic' knowledge and skills, which will be useful throughout the programme. However, while we, as course coordinators, see this as logic, the students are not necessarily aware of this (Johannsen et al., 2013). It is thus important to explain the rationale for a course as well as individual lectures in detail to the students. One way to do this is to introduce Intended Learning Outcomes (ILOs), using verbs to highlight what it is expected the student can do after the course (Brabrand & Dahl, 2009). As outlined by Brabrand and Dohn, ILOs can thus be a guiding frame for "what the student does and on what the students are supposed to learn (to do), i.e. what

competencies the students are expected to have by the end of the course" (Brabrand & Dahl, 2009).

In constructive alignment, learning is perceived as a result of the students' activities, so what the students actually do in their learning (Mørcke & Rump, 2013). What has been a main concern in my new role as course coordinator is that this course is built around the students' quite passively getting exposed to what they need to learn. The teaching components are to a large extent research-based, however in Mick Healey's model, the students are much more the 'audience' than 'participants' (Bonderup & Dolin, 2013). Currently, the only assessment of the course is summative feedback, i.e. the final exam. There are no formative feedback or other types of assessment build into the course. While I can hope the students obtain the knowledge, skills and competencies spelled out in the intended learning outcomes, I actually do not know before the final exam. The students do not know either. Hounsell et al. outline how feedback should be included in all aspects of the student's university experience and thus it has many aims and shapes (Bonderup & Dolin, 2013). 'Formative feedback' is one approach. Formative feedback is forward-looking, providing the students with the opportunity to change their approach. This can for example be in the form of lecturer-student feedback, peer feedback or guizzes. As previously mentioned, another way to make this clear is by introducing ILOs stating what the students is supposed to take away from the lecture(s) (Brabrand & Dahl, 2009).

Methodology

The intervention for this final project consists of two components: increased alignment and congruence as well as feedback.

Increased alignment and congruence

The 'increased alignment and congruence' component consisted of four different interventions.

(i) Each week of the course was provided a headline and an overall theme, which was made visible on Absalon by making use of pictures illustrative of the theme.

- (ii) Each lecturer was asked to provide an ILO for their session, which was presented on Absalon as well as in their power point presentation.
- (iii) I initiated the course with an exercise situating the course in the degree programme and where the students and I aligned expectations. Specifically, each student was asked to fill out three post-its with their expectations to the course. After a class-room discussion of their expectations, I highlighted my expectations to them as students, i.e. active participation
- (iv) Finally, I used myself as the red thread, practicing 'being there and being seen' as a way of binding together the course and being available to questions the students had along the way

Providing feedback

To introduce feedback throughout the course, I asked each lecturer to provide at least one question with one right and several wrong answers relating to the sessions they had taught. On the basis of this, three quizzes, placed on Absalon, was developed for the course. The quizzes could be taken whenever it was relevant to the students.

Evaluation

The interventions were evaluated using the following approaches:

- · Tracking of the number of ILOs obtained
- Comparing the post-its and notes from the 'alignment of expectations' exercise at the beginning of the course with feedback from the mandatory evaluation session at the end of the course as well as with the written evaluation report. I specifically asked about how the students felt the expectations they had in the beginning of the course were met.
- The quizzes were evaluated by tracking how many took the quiz and how they scored. Furthermore, the usefulness of the quiz was specifically asked about during the final evaluation.
- Finally, the evaluation included a discussion about the students' perceptions of alignment of the different course elements.

Findings

The aim of this intervention was to introduce alignment and congruence as well as feedback in the course 'Global Health and Diseases'. The findings are presented in the below.

Increased alignment and congruence

After working on the new, coherent structure, each week was clearly labeled with an overall theme, which was presented on Absalon. A total of 24 of the 25 engaged lecturers during the course provided an ILO for their lecture(s), though the way they were constructed differed. The ILOs were clearly presented on Absalon for each session and in power-point presentation(s). In their evaluation, the students mentioned how:

"Progression was very good. Students liked the week structure and the order of the weeks also made sense" (MSc Global Health students, 2021) "As mentioned before, the structure and organisation of the course

"As mentioned before, the structure and organisation of the course was experienced as very positive. Students appreciated the themeper-week structure." (MSc Global Health students, 2021)

All students were engaged in the 'leveling of expectations' exercise and happily contributed, both to writing the post-its as well as discussing themes highlighted afterwards. We had a fruitful discussion of the issues they brought up. Their expectations ranged from them looking forward to focus on specific themes, such as an interest in a certain geographical location or disease, or more overall thoughts on looking forward to diving into at theme "that truly inspires me" (quote from one of the post-its). In my expectations to them, I highlighted that I expected them to show up prepared and ready to engage in discussions. This they truly lived up to. I have continuously discussed with colleagues how it has been a long time since we had a class this eager to discuss, engage with lecturers and ask questions. During the final evaluation, I specifically asked about how they felt the expectations they had noted down on the post-its had been met during the course. They responded to this in a positive manner:

"Best parts were the organisation and structure of the course, the lecturers (their expertise, experiences in the field, their approachability and their different styles of teaching). The overall study environment was very great. Students felt challenged, enriched by the study material and comfortable to ask questions." (MSc Global Health students, 2021)

The latter part of the quote can be seen as a way of describing a friendly study environment. Specifically, the students highlighted how it was great that I, as course responsible, was around and available.

Providing feedback

In total, 3 quizzes with a total of 90 questions were produced. As indicated in Table 1, the highest number of respondents were 24, of whom several conducted the quiz numerous times.

 Table 1. Overview of the quizzes developed, number of questions and respondents and scores.

	No. of questions	No. of respondents	Average score	High score	Low score
Quiz 1	26	24	76%	99%	21%
Quiz 2	24	19	75%	100%	27%
Quiz 3	40	18	58%	91%	0%

During the final evaluation it was highlighted how some students thought the quizzes were helpful in their preparations to the oral exam. They highlighted how it was "*nice to have an idea of what questions could entail*" (class-room evaluation). Other students were honest about not making use of the quizzes.

Discussion and implications

In this final assignment I explored ways to increase congruence and alignment as well as student feedback in the MSc Global Health course 'Global Health and Diseases'. Having just taken over the responsibility of this course, my aim was to keep the things that do work in the course, while intervening on the small things that could help make it better. My hope was that these 'tweaks' would help create a good learning experience for the students.

The findings showed that students enjoyed the set-up of the course and directly articulated how they appreciated the structure of the course. The lecturers collaborated on providing ILOs, however, these ILOs differed somewhat in the way they were constructed. In a discussion with my colleague about this intervention, we discussed how it could be relevant to work with the invited lecturers to make their ILOs as precise and similar as possible, in terms of the expected learning outcome. That would help to create even more congruence and understanding about what is expected of the students.

For me as course coordinator, it made a lot of sense to start out the course with the leveling of expectations exercise. It was an appropriate way to get to know the students and vice versa. I believe it helped create a space where the students felt they could also share with me when and if the course was off track or if something else was needed. Me 'being around' throughout the course also helped in this matter. Next year, I will make an effort to follow-up on this exercise midway through the course, in order to make a formal space for the students to share suggestions for changes before the final evaluation.

In the evaluation, a number of students highlighted how they appreciated the guizzes. Both from the evaluation and the statistics of the guizzes, it was also clear how another part of the class, did not make use of them. Going forward, I believe several things could be improved. It was not mandatory for the students to do the quizzes. They were solely presented as a tool for the students to test themselves before the final oral exam. However, going forward, the quizzes could be better integrated into the course by for example setting aside time to discuss the questions and answers in class in order for the students to be able to truly learn from the experience. That was not the case this time around. After discussing this intervention with my colleague, I am also contemplating whether multiplechoice quizzes are the best approach to activate students and prepare them for the exam. We discussed how the ILOs could be much more used in the teaching. For example, a system could be set up in Absalon where students submit three take home messages after each lecture in response to the ILOs. This feedback could be anonymous, and once submitted, the students would see each other's responses. This would make the students reflect about their learning - which is also what is expected of them for the exam, which is very discussion-based. Five to ten minutes could be set aside at the end of each lecture, where the students would have time to submit these reflections. Another type of formative feedback could be considered, such as handing in a smaller assignment several times during the course. By doing so, it would be possible to ask questions that would target a more complex understanding of the issues at play than what is possible through multiple choice. These smaller assignments could be evaluated through peer feedback, which would increase learning both for the person receiving and giving feedback (Rienecker & Bruun, 2013).

After writing the first draft of this paper, I discussed the intervention with a colleague from my department. This was a relevant exercise to continue my reflections on how the intervention could be further developed going forward. We discussed how it could be elaborated why the ILOs provided by lecturers needed more work as well as how the ILOs could be further integrated into the teaching. Specifically, she suggested to make use of the ILOs to make the students reflect about their learning, as previously explained. I believe this would be very relevant, and provide the feedback asked for in a way that a multiple choice quiz is not able to do. Furthermore, this way of reflection would be useful in the students' preparation to their exam.

Conclusion

The aim of this final project was to introduce elements of alignment, congruence and feedback to the MSc Global Health course 'Global Health and Diseases' and explore how students perceived of these issues as influencing their learning. Based on the findings, the intervention elements were generally successful. Especially, the students appeared to experience congruence and alignment in the course and thus the red thread that I saw missing was successfully introduced. While the students performed well in the oral exams, I am, however, not in a position to conclude whether the intervention actually influenced their learning. Going forward, the quizzes could be further integrated into the course or changed into an exercise where they respond with their take home messages to each ILO. Furthermore, I will work with the lecturers to make their ILOs more stringent and coherent.

References

- Bonderup, N., & Dolin, J. (2013). Forskningsbaseret undervisning. In L. Rienecker, P. Jørgensen, J. Dolin, & G. Ingerslev (Eds.), Universitetspædagogik (1st ed.). Samfundslitteratur.
- Brabrand, C., & Dahl, B. (2009). Using the solo taxonomy to analyze competence progression of university science curricula. *Higher Education*, 58(4), 531–549.
- Health, K. U. S. G., Introduction, D., & Challenges, M. (2021). https:// kurser.ku.dk/course/sglk15001u
- Hounsell, D., Entwistle, N., Anderson, C., Bromage, A., Day, K., Hounsell, J., & Xu, R. (2005). Enhancing teaching-learning environments in undergraduate courses. *Final report to the economic and social research council on tlrp project l, 139251099.*
- Johannsen, B., Ulriksen, L., & Holmegaard, H. (2013). Deltagerforudsætninger. In L. Rienecker, P. Jørgensen, J. Dolin, & G. Ingerslev (Eds.), Universitetspædagogik (1st ed., pp. 115–132). Samfundslitteratur.
- Mørcke, A., & Rump, C. (2013). Universitetspædagogiske modeller og principper. In L. Rienecker, P. Jørgensen, J. Dolin, & G. Ingerslev (Eds.), Universitetspædagogik (1st ed., pp. 93–104). Samfundslitteratur.
- MSc Global Health students. (2021). Afrapportering/report, global health and diseases; introduction and major challenges.
- Nicol, D., & Macfarlane-Dick, D. (2006). Formative assessment and selfregulated learning: A model and seven principles of good feedback practice. *Studies in Higher Education*, 31(2), 199–218.
- Rienecker, L., & Bruun, J. (2013). Feedback. In L. Rienecker, P. Jørgensen, J. Dolin, & G. Ingerslev (Eds.), *Universitetspædagogik* (1st ed., pp. 259–280). Samfundslitteratur.