

**PENGELOLAAN TUGAS TERSTRUKTUR DENGAN PENDEKATAN  
INDIVIDUAL UNTUK MENGOPTIMALKAN PERKEMBANGAN  
*UNINTENDED KNOWLEDGE* DAN KEMANDIRIAN BELAJAR PADA  
MATERI SISTEM EKSKRESI SELAMA PEMBELAJARAN DARING**

**TESIS**

diajukan untuk memenuhi sebagian syarat untuk memperoleh gelar  
Magister Pendidikan IPA



oleh

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**PROGRAM STUDI  
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FAKULTAS PASCASARJANA  
UNIVERSITAS PENDIDIKAN INDONESIA  
2021**

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### **PENGELOLAAN TUGAS TERSTRUKTUR DENGAN PENDEKATAN INDIVIDUAL UNTUK MENGOPTIMALKAN PERKEMBANGAN *UNINTENDED KNOWLEDGE* DAN KEMANDIRIAN BELAJAR PADA MATERI SISTEM EKSKRESI SELAMA PEMBELAJARAN DARING**

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Magister Pendidikan (M.Pd) pada Program Studi Pendidikan Ilmu Pengetahuan  
Alam

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## LEMBAR PENGESAHAN TESIS

**PENGELOLAAN TUGAS TERSTRUKTUR DENGAN PENDEKATAN  
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**ABSTRAK**

Efek pandemi Covid-19 menyebabkan pembelajaran yang biasanya dilakukan secara tradisional bertransformasi menjadi pembelajaran dalam jaringan (daring). Penelitian dilakukan untuk menginvestigasi pengelolaan tugas terstruktur dengan pendekatan individual untuk mengembangkan *unintended knowledge* dan kemandirian siswa pada materi sistem ekskresi selama pembelajaran daring. Delapan belas siswa kelas delapan di sebuah sekolah swasta terakreditasi “A” di Tangerang Selatan, guru pengajar, serta satu orang guru IPA independen menjadi partisipan dalam penelitian ini. Metode penelitian yang digunakan adalah studi kasus dengan desain *one-group pretest-posttest*. Sekitar satu minggu sebelum dan setelah pemberian intervensi, seluruh siswa mengerjakan angket kemandirian belajar berisi 17 pernyataan berskala Likert 4 poin. Sementara itu, *unintended knowledge* diidentifikasi melalui jawaban refleksi siswa yang diberikan melalui tautan *Typeform* di akhir Proses Belajar Mengajar (PBM) setiap pertemuan dan setelah siswa mengerjakan tugas terstruktur individu. Terdapat total 29 alternatif tugas terstruktur dengan tujuh pilihan jenis kegiatan yang diberikan melalui tautan *Linktree*, yaitu membaca artikel, mendengarkan *podcast*, menonton video pembelajaran, bermain *games*, observasi diri, bereksperimen, serta belajar dari aplikasi pembelajaran. Hasil penelitian menunjukkan perkembangan *unintended knowledge* siswa, baik secara kuantitas maupun secara kualitas (perubahan miskonsepsi menjadi konsep yang benar). Namun, jumlah siswa dengan tingkat kemandirian belajar “sedang” mengalami penurunan dari 83% menjadi 78%. Terdapat beberapa faktor yang diduga berkontribusi terhadapnya diantaranya, keterbatasan waktu pengambilan data, kesulitan siswa dalam memahami instruksi guru karena keterbatasan komunikasi selama pembelajaran daring, serta faktor perbedaan gender. Hasil penelitian mengimplikasikan pentingnya peran guru dalam menghindari terjadinya miskonsepsi serta pentingnya melakukan memberikan umpan balik terhadap refleksi siswa sebagai *assessment for learning*.

**Kata Kunci:** *pembelajaran daring; unintended knowledge; refleksi; miskonsepsi; kemandirian belajar*

# STRUCTURED TASK MANAGEMENT WITH INDIVIDUAL APPROACH TO OPTIMIZE THE DEVELOPMENT OF UNINTENDED KNOWLEDGE AND STUDENTS' LEARNING INDEPENDENCE ON EXCRETORY SYSTEM TOPIC DURING ONLINE LEARNING ACTIVITY

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## ABSTRACT

The Covid-19 pandemic has led to the transformation of conventional face-to-face learning into online learning. This study was conducted to investigate the management of structured tasks with an individual approach to develop unintended knowledge and students' learning independence during online learning for excretion system topic. Eighteen eighth graders at a private school with an "A" accreditation in South Tangerang, a biology teacher, and one independent science teacher were selected as participants in the study. Case study with *one-group pretest-posttest design* was used in this study. All students worked on a study independence questionnaire containing 17 4-point Likert-scale statements approximately one week before and after the intervention. Unintended knowledge was identified through students' answers provided through Typeform link at the end of each learning session and after students completed individual structured tasks. There were 29 alternative structured tasks with seven activity types provided via Linktree link, namely reading articles, listening to podcast, watching learning videos, playing games, self-observation, experimenting, and learning from application. The results of the study demonstrate development of students' unintended knowledge, both in quantity, as well as in quality in the form correction of misconceptions. However, the number of students with a "moderate" level of learning independence decreased from 83% to 78%. There are several factors that are thought to give contribution to it, including limited time allocation for data collection, students' difficulties in understanding teacher instructions due to limited communication during online learning, as well as gender differences. The results of this study implied the importance of the role of teachers to avoid the emergence of misconceptions as well as giving feedback as an assessment for learning.

**Keywords:** *online learning; unintended knowledge; misconception; independent learning; reflection*

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